

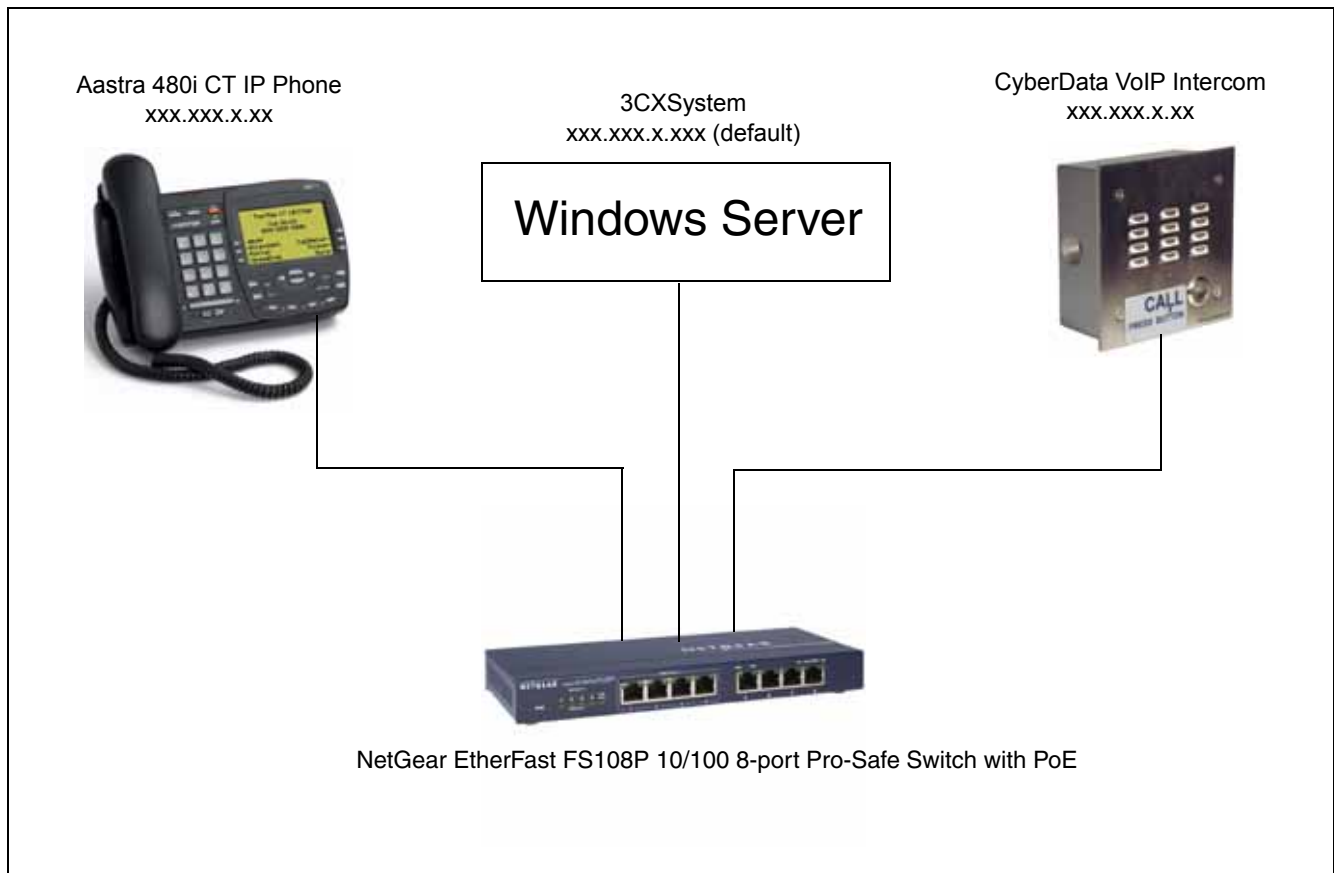


VoIP Intercom with 3CX Server Setup Guide

1.0 Setup Diagram

Figure 1-1 is a setup diagram for a single VoIP Intercom configuration. In this configuration, the Intercom acts as a standalone SIP telephony device.

Figure 1-1. Setup Diagram



2.0 Host PC Environment

Table 2-1. Host PC Environment Details

Description	
Hardware Type	Windows Server
Hardware Version	Windows Server 2008
Software Type	3CX Phone System for Windows
Software Version	6.1.0

3.0 Test Setup Equipment

Table 3-1. Test Setup Equipment

Equipment	Model	Version
Aastra IP Phone	480i CT	N/A
Notes:		
CyberData VoIP Intercom	010935B	3.3.2
Notes:		
Linksys EtherFast 10/100 8-port Workgroup Hub	N/A	N/A
Notes:		
Notes:		
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Notes:		
Notes:		

4.0 Setup Procedure

To set up the 3CX SIP Server for the CyberData VoIP Intercom,

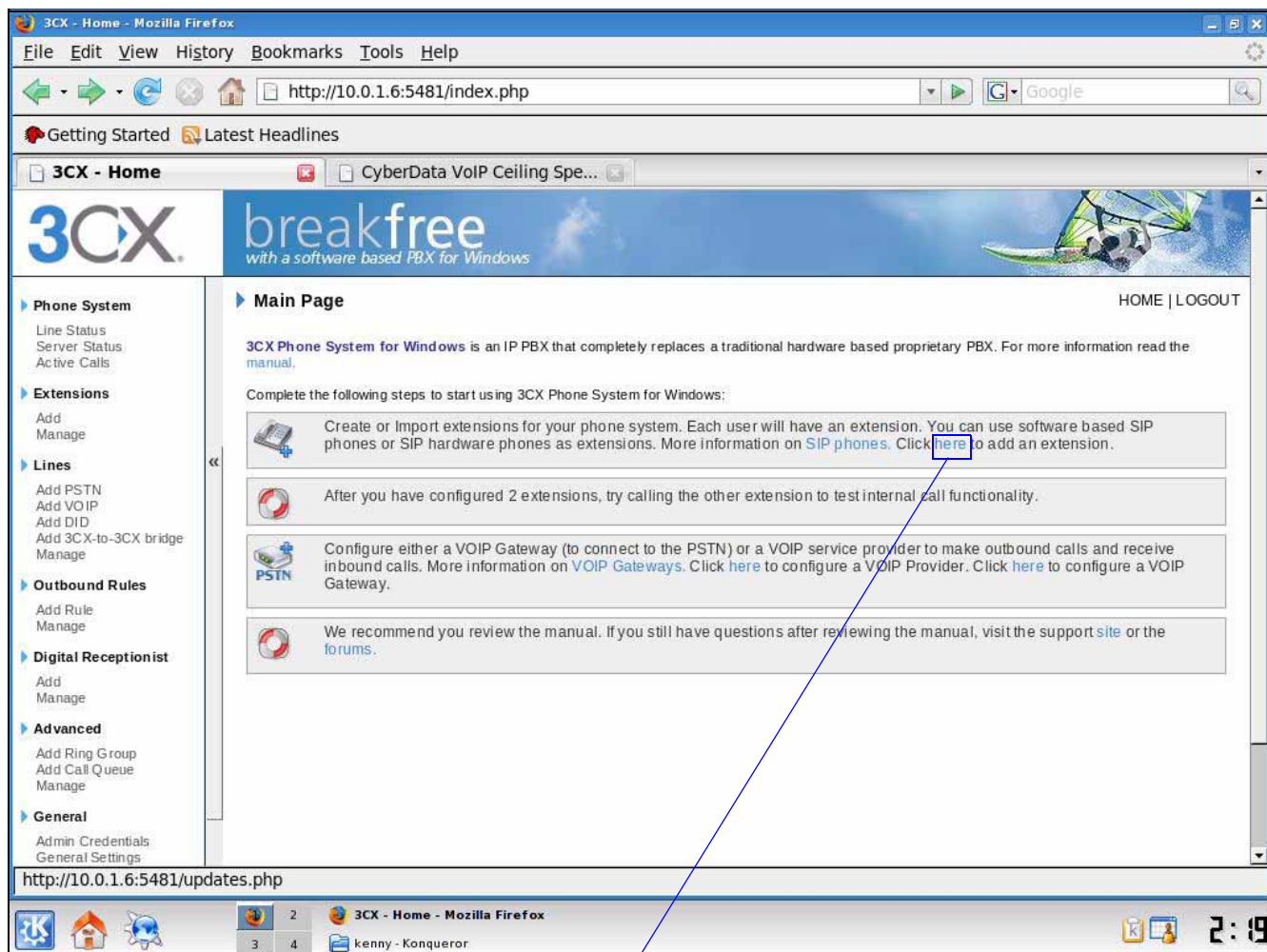
1. Go to the web address of the **Login** page. The web address is determined by the customer.
2. On the **Login** page, type the user name and password into the **User Name** and **Password** fields. See [Figure 4-2](#). The user name and password are determined by the customer.

Figure 4-2. Login

The screenshot shows the login interface for the 3CX Phone System v6.1.0. At the top left is the 3CX logo. To the right of the logo, the text '3CX Phone System v6.1.0' is displayed. Below the logo, there is a 'Language' dropdown menu with 'English' selected. Underneath the language menu are three input fields: 'User Name', 'Password', and a 'Login' button. Three blue lines with labels 'User Name', 'Login', and 'Password' point to the respective fields and button.

3. Click on the **Login** button to go to the **Main Page**.
4. On the **Main Page** under the “**Complete the following steps to start using 3cx Phone System for Windows:**” section, look for the section that has the text, “**Click here to add an extension.**”

Figure 4-3. Main Page



Click on **here** to add an extension.

5. Click on the word **here** to add an extension (Figure 4-3). This will take you to the **Add Extension** page. See Figure 4-4.

6. On the **Add Extension** page (Figure 4-4), type the following information:

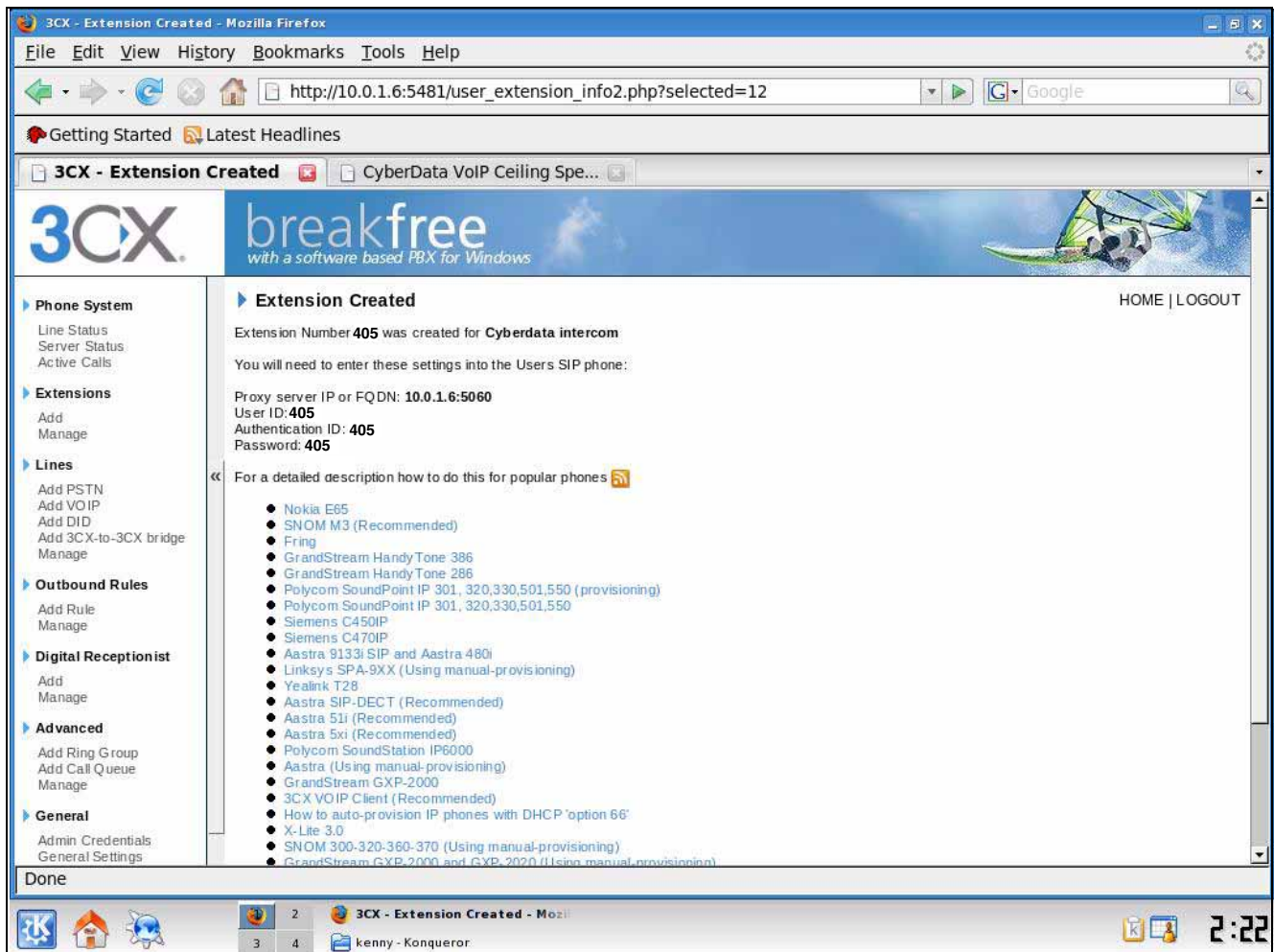
- Extension Number
- First Name
- Last Name
- Email Address
- Login ID
- Password

Figure 4-4. Add Extension Page

Extension Number First Name Last Name Email Address Password Next Login ID

7. Click the **Next** button. You will see the **Extension Created** page. See Figure 4-5.

Figure 4-5. Extension Created Page



8. To register the Intercom, you will need to enter the information from the 3CX **Extension Created** page into the Intercom by logging into the CyberData Configuration Home page. Log into the CyberData Configuration Home page (Figure 4-6) by pointing your browser to the Intercom's IP address.

For the initial configuration of the Intercom, refer to the VoIP Intercom Operation Guide PDF which can be found at the VoIP Intercom product page at:

<http://www.cyberdata.net/support/voip/index.html>

Note You may also download CyberData's VoIP Discovery Utility program which allows you to easily find and configure the default web address of the CyberData VoIP products. CyberData's VoIP Discovery Utility program is available at the following web address:

http://www.cyberdata.net/support/voip/discovery_utility.html

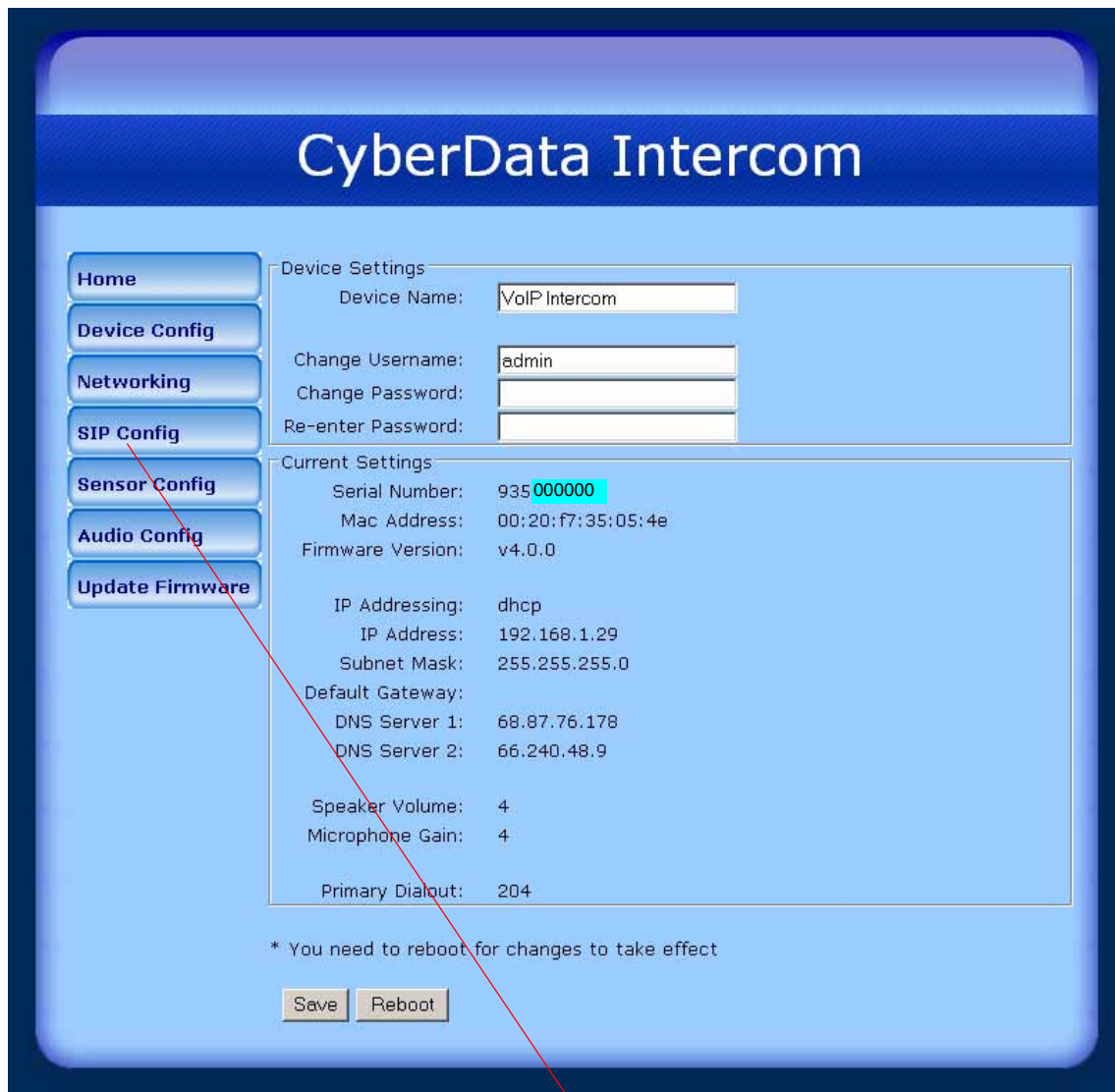
- When prompted, enter the following **Web Access Username** and **Web Access Password** to access the CyberData Configuration Home page (Figure 4-6):

Default Login:

Web Access Username: **admin**

Web Access Password: **admin**

Figure 4-6. CyberData Configuration Home Page



SIP Config

- Click **SIP Setup** to open the **SIP Setup** page. See Figure 4-7.

11. Use the information from the **Extension Created** page (Figure 4-5) to enter the following information on the **SIP Config** page:

- SIP Server
- Remote SIP Port
- Local SIP Port
- SIP User ID
- Authenticate ID
- Authenticate Password
- Dial-Out Extension (put the phone extension into this field)

Note Figure 4-7 is an example of a CyberData VoIP Intercom that is configured to extension 405 and configured to call extension 409.

Figure 4-7. SIP Config Page

CyberData Intercom

SIP Configuration

SIP Settings

SIP Server: 10.0.0.253

Outbound Proxy:

Remote SIP Port: 5060

Local SIP Port: 5060

SIP User ID: 405

Authenticate ID: 405

Authenticate Password: 405

Register with a SIP Server:

Re-registration Interval (in seconds): 60

Unregister on Reboot:

Dial Out Settings

Dial out Extension: 409

Extension ID:

* You need to reboot for changes to take effect

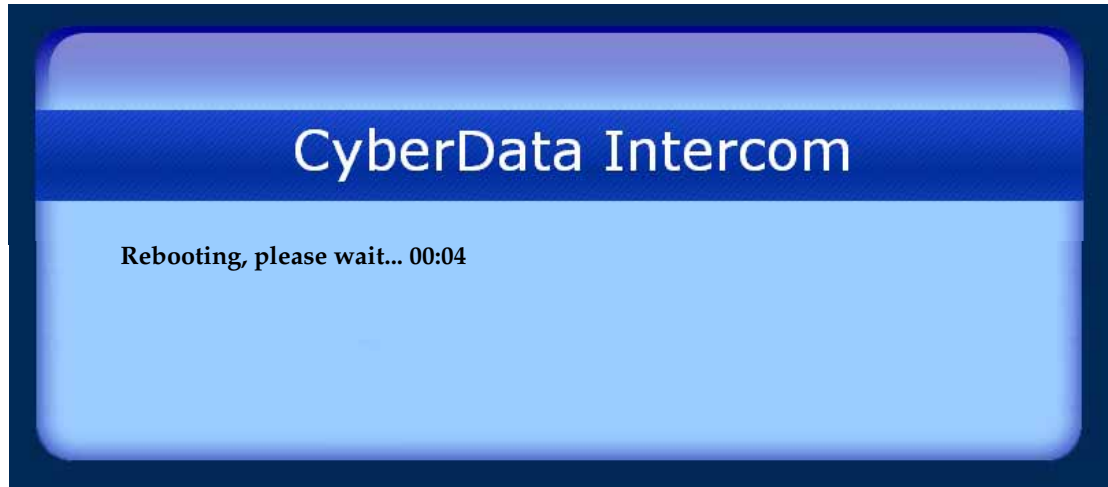
Save Reboot

Save Settings

12. Click **Save**.

-
13. After clicking on **Save**, a reboot timer countdown will begin.

Figure 4-8. Intercom Reboot Timer



14. After the Intercom reboots, the green **Status** LED on the Intercom will blink at one second intervals to indicate normal operation.

Note If **Yes** is selected for **Speaker Beep After Initialization** on the **Intercom Setup** page, you will hear a tone after the initialization sequence is complete.

15. To test the Intercom, complete the following steps:
- Pick up any phone that is configured to the 3CX system and call the Intercom's extension number.
 - When a connection is established (as indicated by a beep), speak into the phone and verify that you can hear your voice through the Intercom.
 - Hang up the phone and press the Call Button on the Intercom.
 - When the phone rings, pick up the phone. Speak into the phone and verify that you can hear your voice through the Intercom.

This step completes the procedure.

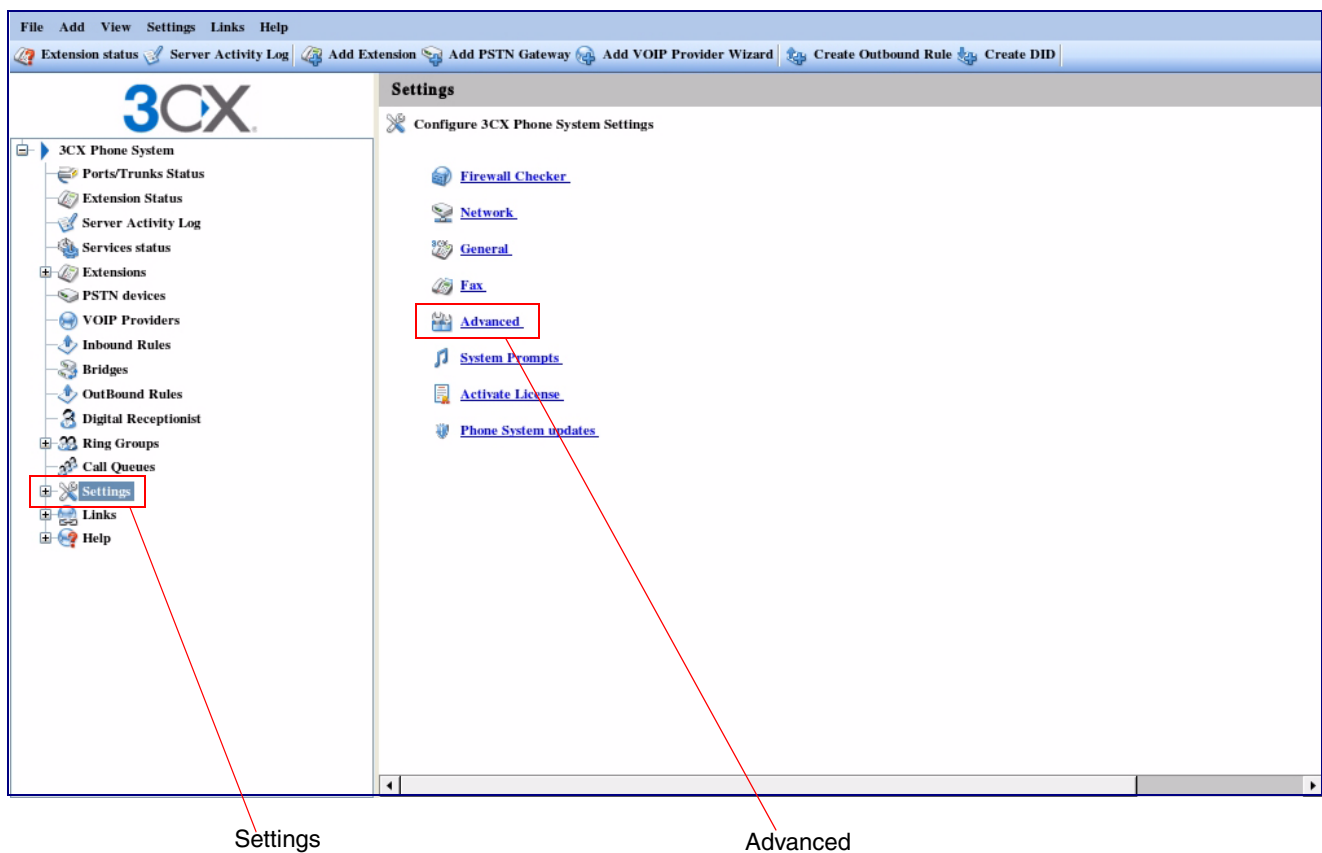
5.0 Frequently Asked Questions

Q: I upgraded my 3CX PBX server to 7.1 and now my Rev B CyberData VoIP Ceiling speaker and My VoIP Paging Amplifier do not stay registered with the server.

A: There is a 3CX version 7.1 registration/timing bug. To correct this problem, complete the following steps:

1. Log into the 3CX PBX system, select **Settings**, and then select **Advanced**. See [Figure 5-1](#).

Figure 5-1. Select Settings and then Select Advanced



2. Select **Custom Parameters**, and then scroll down to select a parameter called **NONCEEXPIRATION**. See [Figure 5-2](#).

Figure 5-2. Select Custom Parameters and then Select NONCEEXPIRATION

The screenshot shows the 3CX Advanced Settings window. The 'Custom Parameters' tab is selected. A table lists various parameters, with 'NONCEEXPIRATION' highlighted. A red box highlights the value '1' in the 'Value' column, and another red box highlights the value '2' in the same column. Red arrows point from the numbered instructions below to these elements.

Name	Description	Value
EXPIRATIONGRACEPERIOD	Expiry Grace Period	0
ALLOWUSEBUSYOPTFORGROUP	="1" will enable use of phone 'Busy' status instead of 'PBX	0
CALLHISTEMPLSINGLE	Path to CallTemplate.xml for single file output	C:\Documents and Sett
CALLHISTEMPLPERCALL	Path to CallTemplate.xml for Per Call file output	C:\Documents and Sett
CALLHISTEMPLSOCK	Path to CallTemplate.xml for Socket text output	C:\Documents and Sett
CALLHISTODDB	Flag to write callhistory to Database or not	true
CALLHISTITERIVL	callhistory Interval in seconds for processing iteration	60
CALLHISTWEEKLY	Flag true=1 file per Week or false=per day	true
CDRENABLE	Enabling of CDR records output 0 = disabled and 1 = enabl	0
SMDRHOSTPORT	SMDR Listening host and port, empty host = disabled(defa	
FORCEREAUTH	forces PBX to re-request authentication if it has nonce that	1
NONCEEXPIRATION	defines nonce expiration time (seconds). By default it is 1 s	2
STUNDISABLED	Flag used to inform PBX about the Stun disabled status	0
WEBSERVERUSER	The admin ID	admin
WEBSERVERPASS	The admin pass	admin
APPPATH	Application Installed Path	C:\Program Files\3CX
IVRPROMPTPATH	Path for the ivr prompt file	C:\Documents and Sett
MUSICONHOLDFILE	Music file for music on hold	onhold.mp3

1. Select **Custom Parameters**

2. Select **NONCEEXPIRATION**

3. Change value from 1 to 2.

3. Change the **NONCEEXPIRATION** parameter value from 1 to 2 and save the changes. See [Figure 5-2](#).